Technology

Over the past few years, the Library has developed and deployed a suite of digital library applications. Our goal has been to build digital content in one place and develop focused applications with a variety of front-ends for different purposes, all working together to provide a seamless experience for our users. For more information on our IT Teams, refer to the Team Handbooks for:

- Discovery and Access Services (DACS)
- Digital Library Services (DLS)
- Research Data and Statistical Services (RDSS)
- Library IT Operations

PUL Digital Repository (Figgy)

Figgy is a digital repository which allows PUL staff to ingest, build, and publish digital objects. It supports books, manuscripts, maps, and ephemera; we are also currently adding support for audio and video. Of these, ephemera have the most advanced forms of metadata entry in Figgy, including support for controlled vocabularies management. As the main tool for digital content management, Figgy allows files to be ingested from local staging servers or Google Drive, syncing metadata from Voyager or Finding Aids as well as generating derivatives for use with our images and geographic information systems (GIS) servers. Once published, digital objects from Figgy are displayed to users in our other applications.

Built on Open Source

A big part of our strategy is collaborating with Open Source communities. This lets us leverage existing projects that already do much of what we want and focus our development efforts on the Princeton-specific needs, like custom workflows, data modeling, displays, and integration with our other systems. It also allows us to have a larger impact when we share our contributions with the broader community.

The main open source projects that we are using are:

- **blacklight**: A discovery platform used by all of our applications
  - **GeoBlacklight**: an extension of Blacklight built to work with geospatial data, used by the maps portal. Eliot Jordan is one of the principal contributors.
  - **Spotlight**: an extension of Blacklight created to build digital collections, used by DPUL.

- **samvera**: A digital repository framework used by Figgy and built on Valkyrie, a new persistence layer for Samvera. Princeton started development and has since been joined by developers from several other institutions.

- **IIIF**: A set of specifications for sharing images (and now audio and video)
  - **Loris**: IIIF image server, developed by Jon Stroop.
  - **IIIF Manifest**: IIIF presentation manifest library, originally developed by Trey Pendragon as part of Plum, now widely used in the Samvera community.
  - **Universal Viewer**: an IIIF viewer that supports a broad range of formats and rich metadata.